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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/520,107

09/16/2005

Mamoru Kudo

SON-2783

2802

23353 7590 05/07/2008  
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EXAMINER

PATANKAR, ANEETA V

ART UNIT

PAPER NUMBER

4134

MAIL DATE

DELIVERY MODE

05/07/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/520,107	<b>Applicant(s)</b> KUDO, MAMORU	
	<b>Examiner</b> ANEETA PATANKAR	<b>Art Unit</b> 4134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/3/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/3/2005</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. **Claims 1-15** are rejected under 35 U.S.C. 102(a) as being anticipated by U.S.

Patent Pub. No. 2002/0136137 A1 to *Shishido et al.*

As to **claim 1**, *Shishido* discloses a recording apparatus, characterized by comprising: bit pattern determining means which determines a bit pattern of coupling bits to be inserted into predetermined positions of main data encoded by a predetermined recording/encoding format (Figs 5, 8, paragraphs 165 and 176-177), and is able to determine said bit pattern of said coupling bits based on sub data to be recorded on a recording medium together with said main data (Fig. 12, paragraphs 190-194); coupling bits inserting means for inserting said bit pattern determined by said bit pattern determining means into said predetermined positions of said encoded main data (Fig. 11, paragraphs 176,184-188); and recording means for recording information formed by inserting said coupling bits into said main data, on said recording medium (e.g. disk) (Fig. 5, paragraph 177).

As to **claim 2**, *Shishido* discloses the recording apparatus, characterized in that: said bit pattern determining means is configured to carry out the determination of a bit pattern based on said sub data with regard to coupling bits

(Fig. 12, paragraph 190-194) to be inserted between two signal units both of which have fixed bit patterns and are in a forward and backward relation among signal units forming said main data (Fig. 5, paragraph 166).

As to **claim 3**, *Shishido* discloses the recording apparatus, characterized in that: said two signal units are a frame synchronizing signal and a sub code sync (Fig. 5, paragraph 177).

As to **claim 4**, *Shishido* discloses a recording method, characterized by executing; a bit pattern determining sequence which determines a bit pattern of coupling bits to be inserted into predetermined positions of main data encoded by a predetermined recording/encoding format (Fig. 8, paragraphs 176-177), and is able to determine said bit pattern of said coupling bits based on sub data to be recorded on a recording medium together with said main data (Fig. 12, paragraphs 190-194); a coupling bits inserting sequence for inserting said coupling bits of said bit pattern determined by said bit pattern determining sequence into said predetermined positions of said encoded main data (Fig. 11, paragraphs 176, 184-188); and a recording sequence for recording information formed by inserting said coupling bits into said main data, on said recording medium (Fig. 5, paragraph 177).

As to **claim 5**, *Shishido* discloses the recording method, characterized in that: said bit pattern determining sequence is configured to carry out the determination of a bit pattern based on said sub data with regard to coupling bits (Fig. 12, paragraphs 190-194) to be inserted between two signal units both of

which have fixed bit patterns and are in a forward and backward relation among signal units forming said main data (Fig. 5, paragraph 166).

As to **claim 6**, *Shishido* discloses the recording method, characterized in that: said two signal units area frame synchronizing signal and a sub code sync (Fig. 5, paragraph 177).

As to **claim 7**, *Shishido* discloses a reproducing apparatus, characterized by comprising: reading means for extracting and reading coupling bits from a recording medium recording information constituted by at least main data encoded by a predetermined recording/encoding format and said coupling bits to be inserted into predetermined positions of said main data (Fig. 6, paragraph 178-179); and data value acquiring means for acquiring a data value served as sub data by utilizing a bit pattern of said coupling bits read by said reading means (Fig. 4, paragraph 132).

As to **claim 8**, *Shishido* discloses the reproducing apparatus, characterized in that: said reading means extracts coupling bits inserted between two signal units both of which have fixed bit patterns and are in a forward and backward relation among signal units forming said main data (Fig. 5, paragraph 166); and said data value acquiring means acquires said value data served as sub data based on the combination of either one of bit patterns held by said two signal units and a bit pattern of said coupling bits (Fig. 4, paragraph 132).

As to **claim 9**, *Shishido* discloses the reproducing apparatus, characterized in that: said two signal units are a frame synchronizing signal and a sub code sync (Fig. 5, paragraph 177).

As to **claim 10**, *Shishido* discloses a reproducing method, characterized by executing: a reading sequence for extracting and reading coupling bits from a recording medium recording information constituted by at least main data encoded by a predetermined recording/encoding form at and said coupling bits to be inserted into predetermined positions of said main data (Fig. 6, paragraphs 178-179); and a data value acquiring sequence for acquiring a data value served as sub data by utilizing a bit pattern of said coupling bits read by said reading sequence (Fig. 4, paragraph 132).

As to **claim 11**, *Shishido* discloses the reproducing method, said reading sequence extracts coupling bits inserted between two signal units both of which have fixed bit patterns and are in a forward and backward relation among signal units forming said main data (Fig. 5, paragraph 166); and said data value acquiring sequence acquires said data value served as sub data based on the combination of either one of bit patterns held by said two signal units and a bit pattern of said coupling bits (Fig. 4, paragraph 132).

As to **claim 12**, *Shishido* discloses the reproducing method according to claim ii, characterized in that said: two signal units are a frame synchronizing signal and a sub code sync (Fig. 5, paragraph 177).

As to **claim 13**, *Shishido* discloses a recording medium, characterized by recording information constituted by main data encoded by a predetermined recording/encoding format and coupling bits to be inserted into predetermined positions of said main data (Fig. 8, paragraphs 176-177); wherein said coupling bits are recorded with a bit pattern corresponding to a data value served as sub data (Fig. 12, paragraphs 190-194).

As to **claim 14**, *Shishido* discloses The recording medium, characterized in that: said coupling bit having a bit pattern corresponding to said data value served as sub data is inserted between two signal units both of which have fixed bit pattern and are in a forward and backward relation among signal units forming said main data (Fig. 5, paragraph 166).

As to **claim 15**, *Shishido* discloses the recording medium, characterized in that: said two signal units area frame synchronizing signal and a sub code sync (Fig. 5, paragraph 177).

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANEETA PATANKAR whose telephone number is (571)272-9773. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LunYi Lao can be reached on (571)272-7671. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aneeta V. Patankar  
Patent Examiner  
Art Unit 4134

/AVP/  
April, 30, 2008

/LUN-YI LAO/  
Supervisory Patent Examiner, Art Unit 4134